

Name: _____

at1121exam_practice: Radicals and Squares (v604)

Question 1

Simplify the radical expressions.

$$\sqrt{99}$$

$$\sqrt{8}$$

$$\sqrt{44}$$

Question 2

Find all solutions to the equation below:

$$3(x + 10)^2 - 4 = 71$$

Question 3

By completing the square, find both solutions to the given equation. *You must show work for full credit!*

$$x^2 - 6x = 91$$

Question 4

A quadratic polynomial function is shown below in standard form.

$$y = 3x^2 + 24x + 54$$

Express the function in **vertex form** and identify the **location** of the vertex.